

SCULLY STEEL & IRON COMPANY

CHICAGO, ILL., U.S.A.

Cable Address
"SCULIRON" Chicago
Iron Age Code on page 8

Distributors of Ironworkers' Tools and Supplies

Products

BOILER MAKING AND RE-PAIRING TOOLS	I-BEAM TROLLEYS
STAY BOLTS AND STAY BOLT TAPS	ROTARY SHEARING MACHINES
PATCH BOLTS AND PATCH BOLT TAPS	MANHOLE FITTINGS
BOILER TEST PUMPS	BOILER BRACES
CHAIN HOISTS	SCREW PUNCHES
	FLANGES
	TUBE EXPANDERS

Also, Flue Cleaners, Boilermakers' Hammers, Chain, Chisels for Hand Use and Pneumatic Hammers, Clamps, Hammer Handles, Boiler Lugs, Manhole Bolts, Boiler Manheads and Fittings, Power Punches, Radial Drills, Angle Shears, Bar Cutters, Reamers, Rivet Forges, Sledges, Mauls, Hand Lever Punches, Hose Couplings, Boilermakers' Screw Plates, Babbitt, Flue Plugs, Copper Ferrules and Steel Supplies.

Scully Service

We carry large stocks of tools, machinery and supplies for boiler shops, ironworkers, structural iron works, railway shops, shipyards, etc.; prompt shipments are thus assured. Our tools are of the very best quality and give the best possible service. We will gladly send catalogues and full information.

Standard Roller Tube Expanders

See Table I for sizes and code words.

Self-Feed Roller Tube Expanders

The rolls, detachable mandrel, frame and guard of this expander are made of the best tool steel, and tempered. Rolls cannot fall inside or outside when the mandrel is removed. Rolls are double length and reversible; self feeding; furnished with frictionless phosphor bronze bearing, impossible to get out of order, reducing friction to a minimum.

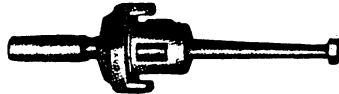


FIG. 3. STANDARD ROLLER TUBE EXPANDER



FIG. 40. SELF-FEED ROLLER TUBE EXPANDER

Standard Sectional Tube Expander

Used mostly on fire boxes of threshing engines and for repair work. When ordering state thickness of tube sheet.



FIG. 150. STANDARD SECTIONAL TUBE EXPANDER

"Ideal" Sectional Tube Expander

This expander is made entirely of best tool steel and tempered. For both hand and power use. When ordering, state thickness of tube sheet.

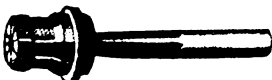


FIG. 285. "IDEAL" SECTIONAL TUBE EXPANDER

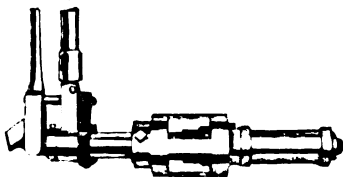


FIG. 375. "IDEAL" SELF-FEED TUBE CUTTER

TABLE I. SIZES AND CODE WORDS. TUBE EXPANDERS AND TUBE CUTTERS

(1) Size of tool for outside diameter tube . . . mm.	1 25	1 29	1 32	1 35	1 38	1 41	1 45	1 48	2 51	2 54	2 57	2 60	2 64
(2) Standard Roller Tube Expanders . . .	LAB	FINCH	LADY	FONT	LAG	FOY	LEE	LAMA	LAMP	FORUM	LANCE	FROST	LEPRY
(3) Self-feed Roller Tube Expanders . . .	FASHION		FORDO		FLOSS		FROG	FOE	FORD		FOSSIL		FOAL
(4) Standard Sectional Tube Expanders . . .	PACA		FACE		PACK		PAD	TOAD	PLY		PAIN	TREBLE	PALACE
(5) "Ideal" Sectional Tube Expanders . . .					TILT	TOM	TIDY		TOP	TRAP	TIGER		TOTTER
(6) "Ideal" Self-feed Tube Cutters . . .									WAIL		WAD		WASP

(1) Size of tool for outside diameter tube . . . mm.	2 67	2 70	3 76	3 83	3 89	3 95	4 102	4 108	4 114	4 121	5 127	5 133	5 140	6 152
(2) Standard Roller Tube Expanders . . .	FLOG	LIAS	LAX	LAZAS	LEAM	LEAL	LIB	LEAP	LEAR	FISK	LEAH	FADGE	FALCUM	LEGATO
(3) Self-feed Roller Tube Expanders . . .		FAGOT	FROLIC	FOWL	FROCK	FAIRY	FORK	FLOCK	FOLD		FED.			FEEZE
(4) Standard Sectional Tube Expanders . . .		PALL	PATH	PATIENT	PATRON		PANSE							
(5) "Ideal" Sectional Tube Expanders . . .			TORE	WEED	WAX		TOAST	WOE			WOLF		WOOD	WIZARD
(6) "Ideal" Self-feed Tube Cutters . . .		WJSK	WAR				WEB							

Note: Expanders and Cutters are made only in sizes for which a code word is given.

"Ideal" Self-Feed Tube Cutter

This cutter cuts off new tubes with a bevel ready for beading. Will cut off old tubes inside boiler head.

Tube Beading Tools



FIG. 1005. TUBE BEADING TOOL—HAND

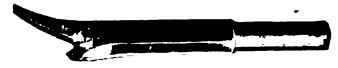


FIG. 1006. TUBE BEADING TOOL—PNEUMATIC

TABLE II. SPECIFICATIONS. TUBE BEADING TOOLS

	For hand use		For pneumatic hammer	
(1) Size in. (mm.)	3/4 (19)	7/8 (22)	3/4 (19)	7/8 (22)
(2) Code word	GAIN	GLOVE	NIP	NONE

Scully Railroad Tube Cutter

This is a quick tool for cutting out old tubes. Operates in connection with air drill. Cuts off tubes in 1 1/2 revolutions of cutting knife. Cuts tubes squarely and without burr. Spring arrangement returns cutter to original position after each cut and motor never stops.

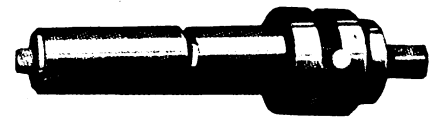


FIG. 1007. SCULLY RAILROAD TUBE CUTTER

TABLE III. SPECIFICATIONS. SCULLY RAILROAD TUBE CUTTER

(1) Size in. (mm.)	1 7/8 (48)	2 (51)	2 1/4 (57)
(2) Code word	HEED	HERO	HIDE

Threaded Boiler Stay Bolts

Made with squared head, 1 in. (25 mm.) long, 12 V-threads per in. (2.1 mm. pitch). Carried in stock 18 and 36 in. (457 and 914 mm.) long. Also made any length desired. Specify over all length.



FIG. 1008. THREADED BOILER STAY BOLT. Code Word: HARIS

Diameters: 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 3/8, 1 1/2, 1 3/4, 1 7/8 and 2 in. (19, 22, 24, 25, 27, 29, 30, 32, 35, 38 and 41 mm.).

Stay Bolt Taps

Carried in stock 12 V-threads per in. (2.1 mm. pitch).



FIG. 1009. STAY BOLT TAP

TABLE IV. DIMENSIONS. STAY BOLT TAPS

Diameter		Length		Code word
in.	mm.	in.	mm.	
3/4	19	16-18-21 and 24	406-457-533 and 610	OFFIM
7/8	22	16-18-21-24 and 30	406-457-533-610 and 762	OFFAR
1	24	16-18-21 and 24	406-457-533 and 610	OFFUX
1 1/8	25	16-18-21-24 and 36	406-457-533-610 and 914	OFFEL
1 1/4	27	18-21 and 24	457-533 and 610	OFFON
1 3/8	29	21 and 24	533 and 610	OFFIS
1 1/2	32	24 and 36	610 and 914	OFFTD

Other diameters, threads and lengths made to order.

Boiler Patch Bolts

Carried in stock 12 V-threads per in. (2.1 mm. pitch.): $\frac{1}{2}$ in. (13 mm.) dia., $\frac{3}{8}$, $1, 1\frac{1}{4}$, and $1\frac{1}{2}$ in. (19, 25, 32 and 38 mm.) long; $\frac{5}{8}$, $\frac{3}{4}$, $1\frac{1}{8}$ and $\frac{7}{8}$ in. (16, 19, 21 and 22 mm.) dia., $1, 1\frac{1}{4}$ and $1\frac{1}{2}$ in. (25, 32 and 38 mm.) long; $1\frac{1}{8}$ and 1 in. (24 and 25 mm.) dia., $1\frac{1}{4}$ and $1\frac{1}{2}$ in. (32, 38 and 38 mm.) long; $1\frac{1}{8}$ in. (29 mm.) dia., $1\frac{1}{2}$ in. (38 mm.) long.

Other lengths and threads made to order.

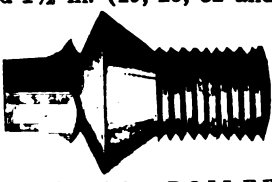


FIG. 1010. BOILER PATCH BOLT
Code: PEXOT

Patch Bolt Taps

Carried in stock $\frac{1}{2}$, $\frac{3}{8}$, $\frac{5}{8}$, $1, 1\frac{1}{4}$, $1\frac{1}{2}$ and $1\frac{3}{4}$ in. (13, 14, 16, 18, 19, 21, 22, 24, 25, 27, 29, 30 and 32 mm.) diameter. Other threads made to order.



FIG. 1011. PATCH BOLT TAP
Code: PEXIL

"Perfection" Flue Cleaner

This cleaner is light, strong and simple. The knives remain sharp at all times. Heads are steel drop forgings. Removes scale from welded flues and carbon from old tubes without cutting the metal.

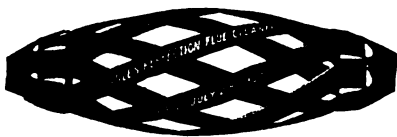


FIG. 1012. "PERFECTION" FLUE CLEANER

TABLE V. SPECIFICATIONS—"PERFECTION" FLUE CLEANERS

Size of Flue		Code word	Size of Flue		Code word	Size of Flue		Code word	Size of Flue		Code word
in.	mm.		in.	mm.		in.	mm.		in.	mm.	
$\frac{1}{4}$	32	JAB	$2\frac{1}{4}$	57	JOY	3	76	JUNK	$3\frac{1}{2}$	89	JURY
$\frac{1}{2}$	38	JACK	$2\frac{1}{2}$	64	JUD	$3\frac{1}{4}$	83	JUMP	4	102	JUST
$\frac{3}{4}$	45	JELLY	$2\frac{3}{4}$	70	JUDGE				$4\frac{1}{2}$	114	JUTE
2	51	JOWL							5	127	JUTTY

Boiler Test Pump

This is a double-acting pump for pressures up to 500 lb. per. sq. in. (35 kg./cm²). It has brass piston (packed) of 2 in. (51 mm.) dia.; brass piston rod, 5 in. (127 mm.) stroke, and forged connections. It has 1 in. (25 mm.) suction pipe and $\frac{3}{4}$ in. (19 mm.) discharge pipe. Net weight, 60 lb. (27 kg.). Code word: KALER.

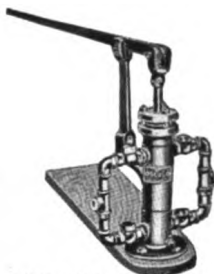


FIG. 1013. BOILER TEST PUMP

Chain Hoists

"YALE" TRIPLEX HIGH SPEED CHAIN HOIST—Handles the heaviest loads with ease, rapidity and with absolute safety.

"YALE" DUPLEX CHAIN HOIST—Screw geared block, designed especially for lightness and compactness in portable use.

"CYCLONE" HIGH SPEED CHAIN HOIST—Strongly built for speed and safety. The bearings have graphite bronze bushings. Hoists are self lubricating.

DIRECT DIFFERENTIAL CHAIN HOIST—For use where speed is not an important feature.

We can furnish any of these chain blocks with extra lift if desired.

TABLE VI. SPECIFICATIONS—DUPLEX CHAIN HOISTS

Capacity long or metric tons	Standard hoist		Minimum distance between hooks		Reach		Net weight		Gross weight		Code word
	ft.	m.	in.	m.	ft.-in.	m.	lb.	kg.	lb.	kg.	
$\frac{1}{2}$	8	24.38	13	0.33	9-1	2.77	46	21	56	25	SAWUV
1	8	24.38	16	0.41	9-4	2.84	59	27	73	33	SAWVO
$1\frac{1}{2}$	8	24.38	19	0.48	9-7	2.92	81	37	100	45	SAWYW
2	9	27.43	21	0.53	10-9	3.28	104	47	130	59	SAXAR
3	10	30.48	25	0.63	12-1	3.68	187	85	234	106	SAXCY
4	10	30.48	29	0.74	12-5	3.78	221	100	265	120	SAXES
5	12	36.58	31	0.79	14-7	4.44	331	150	406	184	SAXHA
6	12	36.58	33	0.84	14-9	4.49	310	141	385	175	SAXIT
8	12	36.58	36	0.91	15-0	4.57	416	189	491	223	SAXLE
10	12	36.58	45	1.14	15-9	4.80	578	262	653	296	SAXOV

TABLE VII. SPECIFICATIONS—TRIPLEX CHAIN HOISTS

Capacity long or metric tons	Standard hoist		Minimum distance between hooks		Net weight		Gross weight		Code word
	ft.	m.	in.	m.	lb.	kg.	lb.	kg.	
$\frac{1}{2}$	8	2.44	13	0.33	58	26	76	34	SAVKY
$\frac{3}{4}$	8	2.44	13	0.33	58	26	76	34	SAVOS
1	8	2.44	16	0.41	92	42	115	52	SAVPA
$1\frac{1}{2}$	8	2.44	18	0.45	132	60	160	73	SAVTE
2	9	2.74	21	0.53	202	92	248	112	SAVUT
3	10	3.05	32	0.81	209	95	256	116	SAVXI
4	10	3.05	37	0.94	299	136	356	161	SAVYO
5	12	3.66	45	1.14	411	186	482	219	SAWAP
6	12	3.66	46	1.17	411	186	482	219	SAWCU
8	12	3.66	49	1.24	500	227	576	261	SAWEC
10	12	3.66	54	1.37	610	277	700	318	SAWGY
12	12	3.66	54	1.37	855	388	1100	499	SAWIS
16	12	3.66	62	1.57	1041	472	1325	601	SAWLA
20	12	3.66	70	1.78	1350	612	1675	760	SAWOT

TABLE VIII. SPECIFICATIONS—"CYCLONE" CHAIN HOISTS

Capacity long or metric tons	Height of lift		Net weight		Gross weight boxed		Shortest distance between hooks		Code word
	ft.	m.	lb.	kg.	lb.	kg.	in.	m.	
$\frac{1}{2}$	8	2.44	71	32	89	40	15	0.38	RAY
1	8	2.44	99	45	107	49	17	0.43	RASH
$1\frac{1}{2}$	8	2.44	118	54	136	62	19	0.48	REACH
2	9	2.74	161	73	184	83	21	0.53	READ
3	10	3.05	226	103	267	121	22	0.56	REGARD
4	10	3.05	260	118	315	143	34	0.86	RELEASE
5	12	3.66	376	171	443	201	38	0.96	RELAY
6	12	3.66	410	186	477	216	41	1.04	REMAND
8	12	3.66	484	220	557	253	43	1.09	REMEDY
10	12	3.66	652	296	722	327	47	1.19	RENT
12	12	3.66	695	315	779	363	50	1.27	REPLACE
16	12	3.66	872	395	1022	463	44	1.12	REPLY
20	12	3.66	1600	726	1927	874	50	1.27	REPORT
30	12	3.66	1860	844	2187	992	63	1.60	REPROVE
40	12	3.66	2120	962	2555	1158	82	2.08	RESCUE

TABLE IX. SPECIFICATIONS—DIFFERENTIAL CHAIN HOISTS

Capacity long or metric tons	Height of lift		Net weight		Gross weight boxed		Code word
	ft.	m.	lb.	kg.	lb.	kg.	
$\frac{1}{2}$	6	1.83	22	10	28	13	RIDE
$\frac{3}{4}$	7	2.14	30	14	38	17	RIG
1	8	2.44	50	23	61	28	RIGHT
$1\frac{1}{2}$	8	2.44	81	37	99	45	RIME
2	9	2.74	125	57	145	66	RINK
3	10	3.05	180	82	210	95	RIPE



FIG. 1014. "YALE" DUPLEX CHAIN HOIST



FIG. 1015. "YALE" TRIPLEX CHAIN HOIST

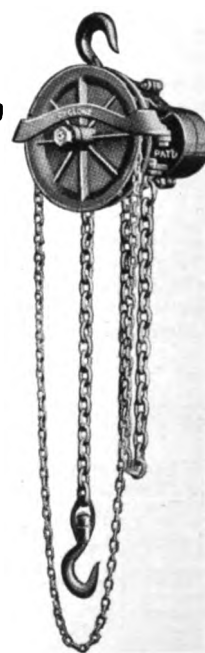


FIG. 1016. "CYCLONE" CHAIN HOIST



FIG. 1017. DIFFERENTIAL CHAIN HOIST

Pneumatic Rivet Sets

These rivet sets are carried in stock for $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 , $1\frac{1}{8}$ and $1\frac{1}{4}$ in. (10, 11, 13, 14, 16, 17, 19, 21, 22, 24, 25, 29, and 32 mm.) rivets, conical and round head; also with flat head for countersunk head rivets. Flush sets with flat, convex or concave end, made to order.



FIG. 1019. PNEUMATIC RIVET SET. Code word: PORIS

Pneumatic Stay Bolt Headers

These headers have center points for bolts with telltale holes or hollow bolts. Carried in stock for $\frac{3}{4}$, $\frac{7}{8}$, 1 , $1\frac{1}{8}$, $1\frac{1}{4}$ and $1\frac{1}{2}$ in. (19, 22, 24, 25, 27, 29 and 32 mm.) stay bolts. Other sizes made to order.



FIG. 1020. PNEUMATIC STAY BOLT HEADER. Code word: PONIS

"Kelly" Tube Flaring Tool

This tool turns over the ends of the tube before expanding. Works rapidly and does not crack or injure tubes. Carried for 2, $2\frac{1}{4}$ and $2\frac{1}{2}$ in. (51, 57, and 64 mm.) tubes.



FIG. 1021. "KELLY" TUBE FLARING TOOL. Code word: POSAL

Scully Weldless Steel Boiler Brace

FIG. 1022. SCULLY WELDLESS STEEL BOILER BRACE. Code word: POSOT

Brace is easily fitted and will gather little scale. Sizes: Diameter of body from $1\frac{1}{2}$ to $1\frac{1}{4}$ in. (29 to 32 mm.); lengths from 2 to 9 ft. (0.6 to 2.7 m.). Made to American Society of Mechanical Engineers' (A. S. M. E.) specifications.

Scully Forged Steel Manhole Heads

For 11 x 15 in. (279 x 381 mm.) manholes. Forged from billets. Light and strong; easily fitted. We also carry "Eclipse" manhole heads (cast iron) for 9 x 14 in. (229 x 356 mm.), 10 x 16 in. (254 x 406 mm.) and 11 x 15 in. (279 x 381 mm.) manholes.

We also furnish saddle plates for single or double row of rivets for all diameters of boilers and tanks.

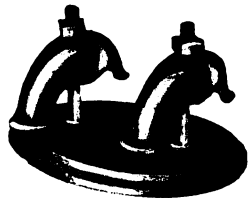


FIG. 1023. SCULLY FORGED STEEL MANHOLE HEAD. Code word: POSED

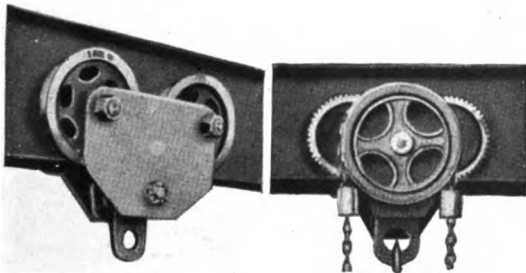
"Ideal" I-Beam Trolley

FIG. 1024. "IDEAL" I-BEAM TROLLEY, PLAIN



FIG. 1025. "IDEAL" I-BEAM TROLLEY, GEARED

TABLE X. SPECIFICATIONS—"IDEAL" I-BEAM TROLLEYS

Capacity long or metric tons	Size light I-beams to which trolleys are adjustable		Plain trolleys				Geared trolleys			
			Approximate weight		Code word		Approximate weight		Code word	
	in.	mm.	lb.	kg.			lb.	kg.		
$\frac{1}{2}$	4, 5, 6 and 7	102-127-152-178	25	11	OAK	—	—	—	—	—
1	5, 6, 7 and 8	127-152-178-203	50	23	OBEY	—	—	—	—	—
2	6, 7, 8 and 9	152-178-203-229	75	34	OBJECT	—	—	—	—	—
3	8, 9, 10 and 12	203-229-254-305	130	59	OBLIGE	150	68	OOGLE	—	—
4	10, 12 and 15	254-305-381	200	91	OBTUSE	225	102	OIL	—	—
5	12, 15 and 18	305-381-457	250	113	OCCUR	300	136	OLIVE	—	—
6	15, 18 and 20	381-457-508	300	136	OCEAN	350	159	ONCE	—	—
8	18, 20 and 24	457-508-610	400	181	ODD	450	204	OFFEND	—	—
10	20 and 24	508-610	525	238	—	575	261	—	—	—

This trolley will handle loads swiftly and safely. Constructed with steel side plates and equipped with roller bearings adjustable for different sizes of I-beams.

Cast Steel Screw Punches

We carry a complete stock of all sizes of punches and dies. We also carry screw punches with square head for ratchets and ratchet handles for same.

TABLE XI. SPECIFICATIONS—CAST STEEL SCREW PUNCHES

Size of Punch	Will punch				Depth of throat		Weight		Code word
	Size of hole		Thickness of metal						
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.	
ZA	$\frac{3}{8}$	8	$\frac{1}{4}$	6	$1\frac{1}{2}$	38	15	7	MACE
ZB	$\frac{1}{2}$	13	$\frac{3}{4}$	6	$1\frac{1}{2}$	38	17	8	MAN
ZC	$\frac{1}{2}$	13	$\frac{3}{4}$	8	$1\frac{1}{2}$	38	27	12	MEAL
ZD	$\frac{3}{4}$	19	$1\frac{1}{2}$	13	$2\frac{1}{4}$	57	40	18	MEET
ZE	$\frac{3}{4}$	19	$1\frac{1}{2}$	16	3	76	60	27	MILE
ZG	$\frac{3}{4}$	19	$1\frac{1}{2}$	19	4	102	110	50	MORE

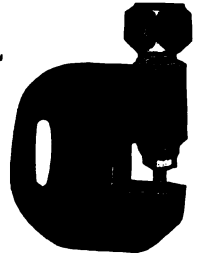


FIG. 1026. CAST STEEL SCREW PUNCH

"Wangler" Rotary Bevel Shears

These shears will bevel plates and angles, either straight or irregular. They can be furnished with special front hold-down which will accommodate angles and plates without change, eliminating the use of extra help.

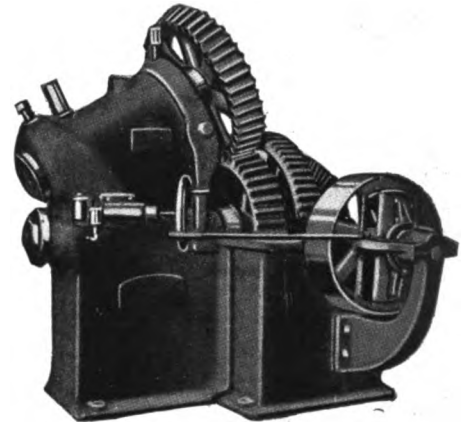


FIG. 1027. "WANGLER" ROTARY BEVEL SHEARS

TABLE XII. SPECIFICATIONS—"WANGLER" ROTARY BEVEL SHEARS

Sizes	Capacity		Diameter cutters		Weight		Power required h. p.	Code word
	in.	mm.	in.	mm.	lb.	kg.		
Z34	$\frac{3}{4}$	19	$9\frac{1}{4}$	235	5300	2400	$7\frac{1}{2}$	SASH
Z40	1	25	$11\frac{1}{4}$	298	9500	4300	10	SCALD

Scully Rotary Splitting Shears

These shears will cut plates of any length or width. The cutting is done by means of two hardened tool steel cutting discs having the edges milled to make self feeding. Both cutters are reversible. All gears are spur gears, having the teeth cut from solid metal. Both cutters are adjustable vertically to allow for the cutting of different thicknesses of plate.

The belt driven shears are carried in stock. Both belt and motor driven machines have friction clutch so that cut may be started or stopped instantly.

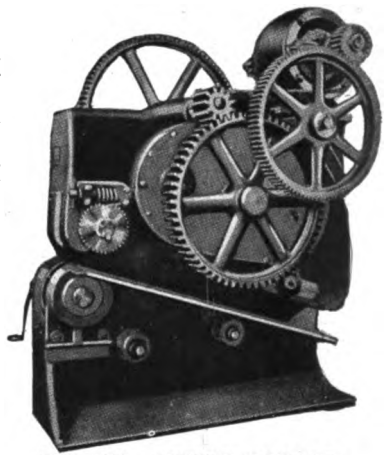


FIG. 1028. SCULLY ROTARY SPLITTING SHEARS

TABLE XIII. SPECIFICATIONS—SCULLY ROTARY SPLITTING SHEARS

No.	Capacity plate		Diameter cutters		Thickness cutters		Weight		Floor Space		Power required h. p.	Code word
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.	in.	m.		
Z1	$\frac{1}{2}$	13	12	305	$1\frac{1}{8}$	29	6500	2948	44x60	1,1x1,5	10	SCAMP
Z2	$\frac{3}{4}$	19	15	381	$1\frac{3}{4}$	35	12300	5679	54x73	1,4x1,9	15	SCARF